

1 **WHAT IS CLAIMED IS:**

2 1. A light emitting diode (LED) having a good heat-dissipating  
3 capability, comprising

4 a leadframe having

5 a first pin with an upper sealed portion and a bottom exposed  
6 portion composed of a neck and a conductor extending from the neck for  
7 connecting to a printed circuit board; and

8 a second pin having an upper sealed portion and a bottom  
9 exposed portion composed of a neck and a conductor extending from the neck  
10 for connecting to the printed circuit board;

11 an LED chip mounted on the upper sealed portion of the first pin and  
12 wire bonded to the upper portion of the second pin; and

13 an encapsulant covering and sealing the upper sealed portion of the first  
14 and second pin and the LED chip.

15 2. The LED as claimed in claim 1, further comprising a transverse fin  
16 expending from the neck of the first fin.

17 3. The LED as claimed in claim 1, further comprising a transverse fin  
18 expending from the neck of the second fin.

19 4. The LED as claimed in claim 2, further comprising a transverse fin  
20 expending from the neck of the second fin.

21 5. The LED as claimed in claim 2, wherein each conductor extends  
22 longitudinally from the neck to form a longitudinal conductor and each neck is  
23 larger than the conductor in a surface area.

24 6. The LED as claimed in claim 3, wherein each conductor extends

1 longitudinally from the neck to form a longitudinal conductor and each neck is  
2 larger than the conductor in a surface area.

3 7. The LED as claimed in claim 4, wherein each conductor extends  
4 longitudinally from the neck to form a longitudinal conductor and each neck is  
5 larger than the conductor in a surface area.

6 8. The LED as claimed in claim 2, wherein  
7 each conductor extends laterally from the neck to form a lateral  
8 conductor and has a surface area; and  
9 each neck has a surface area equal to the surface area of the conductor.

10 9. The LED as claimed in claim 3, wherein  
11 each conductor extends laterally from the neck to form a lateral  
12 conductor and has a surface area; and

13 each neck has a surface area equal to the surface area of the conductor.

14 10. The LED as claimed in claim 4, wherein  
15 each conductor extends laterally from the neck to form a lateral  
16 conductor and has a surface area; and

17 each neck has a surface area equal to the surface area of the conductor.

18 11. The LED as claimed in claim 1, further comprising at least one slot  
19 in the neck of the first pin.

20 12. The LED as claimed in claim 2, further comprising at least one slot  
21 in the neck of the first pin.

22 13. The LED as claimed in claim 3, further comprising at least one slot  
23 in the neck of the first pin.